

April 30, 1879.—Henry Clifton Sorby, Esq., F.R.S.,
President, in the Chair.

The following communications were read:—

1. "*Vectisaurus valdensis*, a New Wealden Dinosaur." By J. W. Hulke, Esq., F.R.S., F.G.S.

The author described some fossil remains, obtained by him in Brixton Bay, Isle of Wight, in 1871, consisting of an ilium, several pre-sacral, and one post-sacral vertebra. He established the Dinosaurian nature of the animal represented by them, and offered proof of its distinctness from already-known forms. He proposes for it the name *Vectisaurus valdensis*, a name descriptive of the locality and formation in which the remains were found by him. The characters presented by the genus *Vectisaurus* were stated to be as follows:—Ilium with a long compressed antacetabular process, having its greatest transverse extent in a vertical plane, and strengthened by a strong ridge produced from the sacral crest. Vertebrae in anterior dorsal region having opisthocœlous centres, their lateral surfaces longitudinally concave, transversely gently convex, meeting below in a blunt keel.

2. "On the Occurrence of the Genus *Dithyrocaris* in the Lower Carboniferous, or Calciferous Sandstone, Series of Scotland; and on that of a second Species of *Anthropalemon* in these Beds." By R. Etheridge, Esq., Jun., F.G.S.

The author, in the first place, referred to the extension of the range in time of the genus *Dithyrocaris*, by the discovery of numerous fragmentary remains of *D. testudineus*, Scouler, in the Calciferous Sandstone or Lower Carboniferous Series of the south of Scotland, about the horizon of the Wardie Shales near Edinburgh, and in the Cement-stone group of Roxburghshire.

A further and more complete description of *Anthropalemon Woodwardi*, Eth., jun., was then given, in which the characters of some of the appendages were more particularly alluded to, such as the eyes, inner and outer antennæ, and first pair of ciliate appendages, thus placing the stability of the species beyond a doubt.

The paper concluded with the description of a second species of *Anthropalemon*, from the Lower Carboniferous rocks of Roxburghshire, for which the author proposed the name of *A. Macconochii*, after the discoverer of the specimen. This remarkable species, of which the carapace is at present the only portion known, differs essentially in the characters of this part of the body from all the other described species of the genus.

MISCELLANEOUS.

Notice of a new Jurassic Mammal. By Prof. O. C. MARSH.

DURING a recent visit to the Rocky Mountains the writer spent some time in examining the deposits known as the Atlantosaurus-

beds, and was rewarded by the discovery of several interesting fossils, among them the lower jaw of a small mammal. This specimen indicates a diminutive marsupial, quite distinct from the one previously described by the writer from the same horizon (*Dryolestes priscus*)*, which has hitherto been the only mammal known from the Jurassic of this country.

The present specimen, which is from the left side, has the larger part of the ramus preserved, with a number of perfect teeth in position. Most of the symphyseal portion is lost, and the posterior part is missing or only faintly indicated. The jaw was remarkably long and slender. The horizontal portion is of nearly equal depth throughout, and the lower margin nearly straight. The form of the coronoid process, condyle, and angle of the jaw cannot be determined from this specimen.

The remarkable feature in this jaw is the series of premolar and molar teeth. These were very numerous, apparently as many as twelve in all, and possibly more. The premolars had their crowns more or less compressed and recurved; and some of them were supported by two fangs. These had a small posterior tubercle at the base of the crown, but none in front. The molar teeth were all single-fanged, with elevated conical crowns; those preserved have a distinct cingulum. The molars increase in size from the first to the fifth. All the teeth preserved have the crowns raised considerably above the upper margin of the jaw, and thus appear to be loosely inserted. A large pointed tooth lying near the jaw appears to be a canine.

The principal dimensions of this specimen are as follows:—

	millim.
Length of portion of jaw preserved	11·5
Extent of five molar teeth	4·0
Extent of entire molar series	5·0
Height of fifth true molar above jaw	2·0
Depth of jaw below fifth molar	1·75
Depth of jaw below last premolar	1·5
Depth of jaw below first premolar	1·4

In comparing this interesting fossil with the forms already known, it is at once evident that it differs widely from any living type. Its nearest affinities are clearly with the genus *Stylodon* of Owen, from the Purbeck beds of England †; and in many respects the correspondence is close.

This specimen clearly indicates a new genus, which may be called *Stylacodon*, and the species represented *Stylacodon gracilis*. With the genus *Stylodon*, this form evidently constitutes a distinct family, which may appropriately be termed the Stylodontidæ. The present specimen indicates an animal somewhat smaller than a weasel, and probably insectivorous in habit.—*Amer. Journ. Sci. & Arts*, July 1879.

* 'Annals,' July 1878, p. 108.

† Geological Magazine, vol. iii. p. 199 (1866), and Palæontographical Society, vol. xxiv. p. 45 (1871).